

a LOC lead frame having a plurality of leads, each lead having a supporting portion, an inner connecting portion and an outer connection portion, wherein the inner connecting portion is between the supporting portion and the outer connecting portion;

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an upper chip having a first upper surface, a first bottom surface and a plurality of first bonding pads on the first upper surface, wherein the first bottom surface is attached on the supporting portions of the leads;

a bottom chip having a second upper surface, a second bottom surface and a plurality of second bonding pads on the second bottom surface, wherein the second upper surface is attached to and located beneath the supporting portions of the leads so that the supporting portions of the leads are sandwiched between the upper chip and the bottom chip;

a plurality of bonding wires electrically connecting the first bonding pads of the upper chip to the inner connecting portions of the corresponding leads, and the second bonding pads of the bottom chip to the inner connecting portions of the corresponding leads, respectively; and

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a package body sealing the upper chip, the bottom chip, the bonding wires, the supporting portions and the inner connecting portions of the leads.

8. (New) The double sided chip package in accordance with claim 7, further comprising a plurality of tapes fixing the upper chip and the bottom chip to the supporting portions of the leads.

9. (New) The double sided chip package in accordance with claim 7, further comprising an epoxy compound filling a space between the upper chip and the bottom chip.

10. (New) The double sided chip package in accordance with claim 7, wherein the supporting portions and the inner connecting portions of the plurality of leads are formed on a common plane.